In re KANEKAR ET AL., Application No. 10/630,176
Amendment A

Amendments to the Claims:

The listing of clams will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method for performing operations for programming one or more associative memories, the method comprising:

identifying a specified policy map;

determining a set of entries based on the specified policy map; and

associating a force no-hit indication with one or more entries of the set of entries;

wherein the force no-hit indication, when associated with a determined highest-matching entry of a group of entries participating in a lookup operation, causes the result of the lookup operation for the group of entries to be considered as not resulting in a hit.

Claim 2 (original): The method of claim 1, comprising programming one or more associative memories with the set of entries.

Claim 3 (original): The method of claim 1, comprising programming a plurality of banks of an associative memory with the set of entries.

Claim 4 (original): The method of claim 3, comprising associating a priority indication with each entry of the set of entries.

Claim 5 (original): The method of claim 4, comprising:
programming a plurality of banks of an associative memory with the set of entries; and
associating a programmable priority level with each of the plurality of banks.

3

In re KANEKAR ET AL., Application No. 10/630,176
Amendment A

Claim 6 (currently amended): ~~The method of claim 3, comprising~~ A method for performing operations for programming one or more associative memories, the method comprising:

identifying a specified policy map;

determining a set of entries based on the specified policy map;

programming a plurality of banks of an associative memory with the set of entries; and

associating a programmable priority level with each of the plurality of banks.

Claim 7 (original): The method of claim 1, wherein at least one of said one or more entries corresponds to a deny operation.

Claim 8 (currently amended): An apparatus for programming one or more associative memories comprising:

means for identifying a specified policy map;

means for determining a set of entries based on the specified policy map; and

means for associating a force no-hit indication with one or more entries of the set of entries;

wherein the force no-hit indication, when associated with a determined highest-matching entry of a group of entries participating in a lookup operation, causes the result of the lookup operation for the group of entries to be considered as not resulting in a hit.

Claim 9 (original): The apparatus of claim 8, comprising means for programming one or more associative memories with the set of entries.

Claim 10 (original): The apparatus of claim 8, comprising means for programming a plurality of banks of an associative memory with the set of entries.

4

In re KANEKAR ET AL., Application No. 10/630,176
Amendment A

Claim 11 (original): The apparatus of claim 10, comprising means for associating a priority indication with each entry of the set of entries.

Claim 12 (original): The apparatus of claim 11, comprising:

means for programming a plurality of banks of an associative memory with the set of entries; and

means for associating a programmable priority level with each of the plurality of banks.

Claim 13 (currently amended): ~~The apparatus of claim 10, comprising~~ An apparatus for programming one or more associative memories comprising:

<u>means for identifying a specified policy map;</u>

<u>means for determining a set of entries based on the specified policy map;</u>

<u>means for programming a plurality of banks of an associative memory with the set of entries, including</u> means for associating a programmable priority level with each of the plurality of banks.

Claim 14 (original): The apparatus of claim 9, wherein at least one of said one or more entries corresponds to a deny operation.

Claim 15 (currently amended): An associative memory comprising:

a plurality of associative memory banks;

wherein each of said one or more associative memory banks includes a plurality of entries; and

wherein each of the plurality of entries includes a force no-hit value field<u>;</u>

<u>wherein the force no-hit indication, when associated with a determined highest-matching entry of a group of entries participating in a lookup operation, causes the result of the lookup operation for the group of entries to be considered as not resulting in a hit.</u>

5

In re KANEKAR ET AL., Application No. 10/630,176
Amendment A

Claim 16 (original): The associative memory of claim 15, wherein each of the plurality of entries includes a priority indication field.

Claim 17 (original): The associative memory of claim 16, comprising:

a plurality of mechanisms for identifying a block highest priority matching entry for each of the plurality of associative memory banks; and

a priority mechanism for identifying a highest priority one of said associative memory entries based on the block highest priority matching entry of each of the plurality of associative memory banks and values of the priority indication fields associated with the for the block highest priority matching entry of each of the plurality of associative memory banks.

Claim 18 (currently amended): ~~The associative memory of claim 16,~~ An associative memory comprising:

a plurality of associative memory banks, wherein each of said one or more associative memory banks includes a plurality of entries;

means for identifying a block highest priority matching entry for each of the plurality of associative memory banks; and

means for identifying a highest priority one of said associative memory entries based on the block highest priority matching entry of each of the plurality of associative memory banks and values of the priority indication fields associated with the for the block highest priority matching entry of each of the plurality of associative memory banks.

6

In re KANEKAR ET AL., Application No. 10/630,176
Amendment A

Claim 19 (currently amended): A computer-readable medium containing computer-executable instructions for performing steps for performing operations for programming one or more associative memories, said steps comprising:

identifying a specified policy map;

determining a set of entries based on the specified policy map; and

associating a force no-hit indication with one or more entries of the set of entries; wherein the force no-hit indication, when associated with a determined highest-matching entry of a group of entries participating in a lookup operation, causes the result of the lookup operation for the group of entries to be considered as not resulting in a hit.

Claim 20 (original): The computer-readable medium of claim 19, wherein said steps comprise programming one or more associative memories with the set of entries.

Claim 21 (original): The computer-readable medium of claim 19, wherein said steps comprise programming a plurality of banks of an associative memory with the set of entries.

Claim 22 (original): The computer-readable medium of claim 21, wherein said steps comprise associating a priority indication with each entry of the set of entries.

Claim 23 (original): The computer-readable medium of claim 22, wherein said steps comprise:

programming a plurality of banks of an associative memory with the set of entries; and

associating a programmable priority level with each of the plurality of banks.

7

In re KANEKAR ET AL., Application No. 10/630,176
Amendment A

Claim 24 (currently amended): ~~The computer-readable medium of claim 21, wherein said steps comprise~~ A computer-readable medium containing computer-executable instructions for performing operations for programming one or more associative memories, said operations comprising:

      identifying a specified policy map;

      determining a set of entries based on the specified policy map;

      programming a plurality of banks of an associative memory with the set of entries; and

      associating a programmable priority level with each of the plurality of banks.

Claim 25 (original): The computer-readable medium of claim 19, wherein at least one of said one or more entries corresponds to a deny operation.

8